

Safety data sheet

according to 1907/2006/EC, Article 31

* SECTION 1: Identification of the substance/mixture and of the company/undertaking

· 1.1 Product identifier

· Trade name: **Perfect Line Premium Thinner Toluene free**

· Article number: PL.PTH.25

· 1.2 Relevant identified uses of the substance or mixture and uses advised against

· Sector of Use

SU3 Industrial uses: Uses of substances as such or in preparations at industrial sites

SU22 Professional uses: Public domain (administration, education, entertainment, services, craftsmen)

· Application of the substance / the mixture

Cleaning agent/ Cleaner

Thinner, Diluent

· Uses advised against SU21 Consumer uses: Private households / general public / consumers

· 1.3 Details of the supplier of the safety data sheet

· Manufacturer/Supplier:

Perfect Line

Postbus 90117

5000 LA TILBURG

T +31(0)857441118

E info@perfectline.nl

W www.perfectline.nl

· Further information obtainable from: Product safety department: info@perfectline.nl

1.4 Emergency telephone number:

National Poisoning Information Centre - Bilthoven - The Netherlands

T +31 (0)30 274 88 88

Restricted to physicians for information on ingredients.

* SECTION 2: Hazards identification

· 2.1 Classification of the substance or mixture

· Classification according to Regulation (EC) No 1272/2008



GHS02 flame

Flam. Liq. 2 H225 Highly flammable liquid and vapour.



GHS05 corrosion

Eye Dam. 1 H318 Causes serious eye damage.



GHS07

STOT SE 3 H336 May cause drowsiness or dizziness.

· 2.2 Label elements

· Labelling according to Regulation (EC) No 1272/2008

The product is classified and labelled according to the CLP regulation.

· Hazard pictograms



GHS02



GHS05



GHS07

· Signal word Danger

(Contd. on page 2)

Trade name: **Perfect Line Premium Thinner Toluene free**

(Contd. of page 1)

- Hazard-determining components of labelling:
 - acetone
 - butan-1-ol
- Hazard statements
 - H225 Highly flammable liquid and vapour.
 - H318 Causes serious eye damage.
 - H336 May cause drowsiness or dizziness.
- Precautionary statements
 - P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
 - P243 Take action to prevent static discharges.
 - P260 Do not breathe mist/vapours/spray.
 - P280 Wear protective gloves/protective clothing/eye protection/face protection.
 - P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
 - P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- Additional information:
 - EUH066 Repeated exposure may cause skin dryness or cracking.
 - Restricted to professional users.
- 2.3 Other hazards
- Results of PBT and vPvB assessment
- PBT: Not applicable.
- vPvB: Not applicable.

* SECTION 3: Composition/information on ingredients

- 3.2 Chemical characterisation: Mixtures
- Description: Mixture of substances listed below with nonhazardous additions.
- Dangerous components %(m/m):

CAS: 67-64-1 EINECS: 200-662-2 Reg.nr.: 01-2119471330-49	acetone ⚠ Flam. Liq. 2, H225; ⚠ Eye Irrit. 2, H319; STOT SE 3, H336	75-100%
CAS: 67-63-0 EINECS: 200-661-7 Reg.nr.: 01-2119457558-25	propan-2-ol ⚠ Flam. Liq. 2, H225; ⚠ Eye Irrit. 2, H319; STOT SE 3, H336	2.5-10%
CAS: 108-65-6 EINECS: 203-603-9 Reg.nr.: 01-2119475791-29	2-methoxy-1-methylethyl acetate ⚠ Flam. Liq. 3, H226	2.5-10%
CAS: 71-36-3 EINECS: 200-751-6 Reg.nr.: 01-2119484630-38	butan-1-ol ⚠ Flam. Liq. 3, H226; ⚠ Eye Dam. 1, H318; ⚠ Acute Tox. 4, H302; Acute Tox. 4, H332; Skin Irrit. 2, H315; STOT SE 3, H335-H336	2.5-10%
CAS: 108-10-1 EINECS: 203-550-1 Reg.nr.: 01-2119473980-30	4-methylpentan-2-one ⚠ Flam. Liq. 2, H225; ⚠ Acute Tox. 4, H332; Eye Irrit. 2, H319; STOT SE 3, H335	2.5-10%
- Additional information: For the wording of the listed hazard phrases refer to section 16.

SECTION 4: First aid measures

- 4.1 Description of first aid measures
- General information: Immediately remove any clothing soiled by the product.
- After inhalation: Supply fresh air; consult doctor in case of complaints.
- After skin contact: Immediately rinse with water.
- After eye contact:
 - Rinse opened eye for several minutes under running water. Then consult a doctor.
 - Remove contactlenses.

(Contd. on page 3)

Trade name: **Perfect Line Premium Thinner Toluene free**

(Contd. of page 2)

- After swallowing:
Do not induce vomiting; call for medical help immediately.
Rinse mouth.
- 4.2 Most important symptoms and effects, both acute and delayed No further relevant information available.
- 4.3 Indication of any immediate medical attention and special treatment needed
No further relevant information available.

SECTION 5: Firefighting measures

- 5.1 Extinguishing media
Suitable extinguishing agents: CO₂ or powder. Fight larger fights with alcohol resistant foam.
For safety reasons unsuitable extinguishing agents: Water with full jet
- 5.2 Special hazards arising from the substance or mixture
During heating or in case of fire poisonous gases are produced.
Carbon monoxide (CO)
- 5.3 Advice for firefighters
Protective equipment: Wear self-contained respiratory protective device.

SECTION 6: Accidental release measures

- 6.1 Personal precautions, protective equipment and emergency procedures
Mount respiratory protective device.
Wear protective equipment. Keep unprotected persons away.
- 6.2 Environmental precautions: Do not allow to enter sewers/ surface or ground water.
- 6.3 Methods and material for containment and cleaning up:
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Use neutralising agent.
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.
- 6.4 Reference to other sections
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

SECTION 7: Handling and storage

- 7.1 Precautions for safe handling
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.
- Information about fire - and explosion protection:
Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.
Keep respiratory protective device available.
- 7.2 Conditions for safe storage, including any incompatibilities
- Storage:
Requirements to be met by storerooms and receptacles:
Store in a cool location.
Store only in the original receptacle.
- Information about storage in one common storage facility: Store away from oxidising agents.
- Further information about storage conditions: Keep container tightly sealed.
- Storage class: 3
- 7.3 Specific end use(s) No further relevant information available.

* SECTION 8: Exposure controls/personal protection

- Additional information about design of technical facilities: No further data; see item 7.

(Contd. on page 4)

Trade name: **Perfect Line Premium Thinner Toluene free**

(Contd. of page 3)

- 8.1 Control parameters
- Ingredients with limit values that require monitoring at the workplace:

67-64-1 acetoneIOELV Long-term value: 1210 mg/m³, 500 ppm**108-65-6 2-methoxy-1-methylethyl acetate**

IOELV Short-term value: 550 mg/m³, 100 ppm
Long-term value: 275 mg/m³, 50 ppm
Skin

108-10-1 4-methylpentan-2-one

IOELV Short-term value: 208 mg/m³, 50 ppm
Long-term value: 83 mg/m³, 20 ppm

- DNELs

67-64-1 acetone

Dermal Long-term exposure - systemic effects	186 mg/kg bw/day (worker)
Inhalative Acute - short-term exposure - local effects	2,420 mg/m ³ (worker)
Long-term exposure - systemic effects	1,210 mg/m ³ (worker)

67-63-0 propan-2-ol

Dermal Long-term exposure - systemic effects	888 mg/kg bw/day (worker)
Inhalative Long-term exposure - systemic effects	500 mg/m ³ (worker)

108-65-6 2-methoxy-1-methylethyl acetate

Dermal Long-term exposure - systemic effects	153.5 mg/kg bw/day (worker)
Inhalative Long-term exposure - systemic effects	275 mg/m ³ (worker)

71-36-3 butan-1-ol

Inhalative Long-term exposure - local effects	310 mg/m ³ (worker)
---	--------------------------------

108-10-1 4-methylpentan-2-one

Dermal Long-term exposure - systemic effects	11.8 mg/kg bw/day (worker)
Inhalative Acute - short-term exposure - systemic effects	208 mg/m ³ (worker)
Acute - short-term exposure - local effects	208 mg/m ³ (worker)
Long-term exposure - systemic effects	83 mg/m ³ (worker)
Long-term exposure - local effects	83 mg/m ³ (worker)

- PNECs

67-64-1 acetone

PNEC 3.04 mg/kg (sediment marine water)
30.4 mg/kg (sediment freshwater)
29.5 mg/kg (soil)
PNEC 100 mg/l (STP)
10.6 mg/l (aqua, freshwater)
21 mg/l (aqua, intermittent releases)
1.06 mg/l (aqua, marine water)

67-63-0 propan-2-ol

PNEC 552 mg/kg (sediment marine water)
552 mg/kg (sediment freshwater)
PNEC 2,251 mg/l (STP)
140.9 mg/l (aqua, freshwater)
140.9 mg/l (aqua, intermittent releases)
140.9 mg/l (aqua, marine water)

(Contd. on page 5)

Trade name: **Perfect Line Premium Thinner Toluene free**

(Contd. of page 4)

108-65-6 2-methoxy-1-methylethyl acetate

PNEC 0.329 mg/kg (sediment marine water)
3.29 mg/kg (sediment freshwater)
0.29 mg/kg (soil)
PNEC 100 mg/l (STP)
6.35 mg/l (aqua, intermittent releases)
0.0635 mg/l (aqua, marine water)
0.635 mg/l (aqua freshwater)

71-36-3 butan-1-ol

PNEC 0.0178 mg/kg (sediment marine water)
0.178 mg/kg (sediment freshwater)
0.015 mg/kg (soil)
PNEC 2,476 mg/l (STP)
0.082 mg/l (aqua, freshwater)
2.25 mg/l (aqua, intermittent releases)
0.0082 mg/l (aqua, marine water)

108-10-1 4-methylpentan-2-one

PNEC 0.83 mg/kg (sediment marine water)
8.27 mg/kg (sediment freshwater)
1.3 mg/kg (soil)
PNEC 27.5 mg/l (STP)
0.6 mg/l (aqua, freshwater)
1.5 mg/l (aqua, intermittent releases)
0.06 mg/l (aqua, marine water)

· Additional information: The lists valid during the making were used as basis.

· 8.2 Exposure controls

· Personal protective equipment:

· General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Do not inhale gases / fumes / aerosols.

Avoid contact with the eyes and skin.

· Respiratory protection:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

Short term filter device:

Filter AX

· Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· Material of gloves

Suitable materials for safety gloves (EN 374):

Butyl rubber, BR

· Penetration time of glove material

Thickness of the gloves \geq 0.625 mm (acetone)

Value for the permeation: Level \geq 480 min (acetone)

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

(Contd. on page 6)

Trade name: **Perfect Line Premium Thinner Toluene free**

(Contd. of page 5)

- Eye protection:



Tightly sealed goggles

- Body protection: Solvent resistant protective clothing

* SECTION 9: Physical and chemical properties

- 9.1 Information on basic physical and chemical properties

- General Information

- Appearance:

Form:	Fluid
Colour:	Colourless or slightly yellow

- Odour: Characteristic

- Odour threshold: Not determined.

- pH-value: Not determined.

- Change in condition

Melting point/freezing point:	Undetermined.
-------------------------------	---------------

Initial boiling point and boiling range:	55.8-56.6 °C
--	--------------

- Flash point: 1 °C

- Flammability (solid, gas): Not applicable.

- Ignition temperature: 315 °C

- Decomposition temperature: Not determined.

- Auto-ignition temperature: Product is not selfigniting.

- Explosive properties: Product is not explosive. However, formation of explosive air/vapour mixtures are possible.

- Explosion limits:

Lower:	2.6 Vol %
--------	-----------

Upper:	13 Vol %
--------	----------

- Vapour pressure at 20 °C: 233 hPa

- Density at 20 °C: 0.8 g/cm³

- Relative density: Not determined.

- Vapour density: Not determined.

- Evaporation rate: Not determined.

- Solubility in / Miscibility with water:

Slightly soluble.

- Partition coefficient: n-octanol/water: Not determined.

- Viscosity:

Dynamic at 20 °C:	1 mPas
-------------------	--------

Kinematic:	Not determined.
------------	-----------------

- Solvent content:

Organic solvents:	100.0 %
-------------------	---------

VOC (EC)	100.00 %
----------	----------

Solids content:	0.0 %
-----------------	-------

- 9.2 Other information: No further relevant information available.

— EU —
(Contd. on page 7)

Trade name: **Perfect Line Premium Thinner Toluene free**

(Contd. of page 6)

SECTION 10: Stability and reactivity

- 10.1 Reactivity No further relevant information available.
- 10.2 Chemical stability
- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- 10.3 Possibility of hazardous reactions Reacts with strong oxidizing agents.
- 10.4 Conditions to avoid High temperatures.
- 10.5 Incompatible materials: Oxidizing agents
- 10.6 Hazardous decomposition products: No dangerous decomposition products known.

* SECTION 11: Toxicological information

- 11.1 Information on toxicological effects
- Acute toxicity Based on available data, the classification criteria are not met.
- LD/LC50 values relevant for classification:

67-64-1 acetone

Oral LD50 5,800 mg/kg (rat)
Dermal LD50 7,400 mg/kg (rabbit)
Inhalative LC50/4h 76 mg/l (rat)

67-63-0 propan-2-ol

Oral LD50 >5,000 mg/kg (rat)
Dermal LD50 5,840 mg/kg (rabbit) (OESO 401)
Inhalative LC50/6h >10,000 ppm (rat) (OESO 403)

108-65-6 2-methoxy-1-methylethyl acetate

Oral LD50 >5,000 mg/kg (rat)
Dermal LD50 >5,000 mg/kg (rat)
Inhalative LC0/3h >2,000 ppm (rat)

71-36-3 butan-1-ol

Oral LD50 2,292 mg/kg (rat) (OESO 401)
Dermal LD50 3,430 mg/kg (rabbit) (OESO 402)
Inhalative LC50/4h >17.76 mg/l (rat)

108-10-1 4-methylpentan-2-one

Oral LD50 2,080 mg/kg (rat)
Dermal LD50 >2,000 mg/kg (rabbit)
Inhalative LC50/4h 8.2-16.4 mg/l (rat)

- Primary irritant effect:
- Skin corrosion/irritation Based on available data, the classification criteria are not met.
- Serious eye damage/irritation
Causes serious eye damage.
- Respiratory or skin sensitisation Based on available data, the classification criteria are not met.
- CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)
- Germ cell mutagenicity Based on available data, the classification criteria are not met.
- Carcinogenicity Based on available data, the classification criteria are not met.
- Reproductive toxicity Based on available data, the classification criteria are not met.
- STOT-single exposure
May cause drowsiness or dizziness.
- STOT-repeated exposure Based on available data, the classification criteria are not met.
- Aspiration hazard Based on available data, the classification criteria are not met.

— EU —
(Contd. on page 8)

Trade name: **Perfect Line Premium Thinner Toluene free**

(Contd. of page 7)

* **SECTION 12: Ecological information**

- 12.1 Toxicity
- Aquatic toxicity:

67-64-1 acetone

EC50 8,800 mg/l (daphnia magna)
EC50/96h 8,300 mg/l (Iepomis macrochirus)
IC50 >100 mg/l (algae)
>100 mg/l (fish)

108-65-6 2-methoxy-1-methylethyl acetate

EC50/48h >400 mg/l (daphnia magna)
LC50/96h 100-180 mg/l (oncorhynchus mykiss)

71-36-3 butan-1-ol

EC50/96h 225 mg/l (pseudokirchneriella subcapitata) (OESO 201)
EC10/17h 2,476 mg/l (pseudomonas putida)
NOEL/21d 4.1 mg/l (daphnia magna) (OECD 211)
EC50/48h 1,328 mg/l (daphnia magna) (OESO 202)
LC50/96h 1,376 mg/l (pimphales promelas) (OESO 203)

108-10-1 4-methylpentan-2-one

EC50/96h 400 mg/l (algae)
EC50/48h >200 mg/l (daphnia magna)
LC50/96h >179 mg/l (fish)

- 12.2 Persistence and degradability No further relevant information available.
- 12.3 Bioaccumulative potential

71-36-3 butan-1-ol

LogPow 0.88 (/)

- 12.4 Mobility in soil No further relevant information available.

- Additional ecological information:

- General notes:

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
Must not reach sewage water or drainage ditch undiluted or unneutralised.

- 12.5 Results of PBT and vPvB assessment

- PBT: Not applicable.

- vPvB: Not applicable.

- 12.6 Other adverse effects No further relevant information available.

SECTION 13: Disposal considerations

- 13.1 Waste treatment methods

- Recommendation

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

- European waste catalogue

07 01 04* other organic solvents, washing liquids and mother liquors

- Uncleaned packaging:

- Recommendation: Disposal must be made according to official regulations.

* **SECTION 14: Transport information**

- 14.1 UN-Number

- ADR/ADN, IMDG, IATA

UN1263

(Contd. on page 9)

Trade name: **Perfect Line Premium Thinner Toluene free**

(Contd. of page 8)

- 14.2 UN proper shipping name
- ADR/ADN 1263 PAINT
- IMDG, IATA PAINT RELATED MATERIAL
- 14.3 Transport hazard class(es)
- ADR/ADN, IMDG, IATA



- Class 3 Flammable liquids.
- Label 3
- 14.4 Packing group
- ADR/ADN, IMDG, IATA II
- 14.5 Environmental hazards:
- Marine pollutant: No
- 14.6 Special precautions for user Warning: Flammable liquids.
- Danger code (Kemler): 33
- EMS Number: F-E,S-E
- Stowage Category B
- 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code Not applicable.
- Transport/Additional information:

-
- ADR/ADN
 - Limited quantities (LQ) 5L
 - Excepted quantities (EQ) Code: E2
Maximum net quantity per inner packaging: 30 ml
Maximum net quantity per outer packaging: 500 ml
 - Transport category 2
 - Tunnel restriction code D/E

-
- IMDG
 - Limited quantities (LQ) 5L
 - Excepted quantities (EQ) Code: E2
Maximum net quantity per inner packaging: 30 ml
Maximum net quantity per outer packaging: 500 ml
 - UN "Model Regulation": UN 1263 PAINT, 3, II

* SECTION 15: Regulatory information

- 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- Directive 2012/18/EU
- Named dangerous substances - ANNEX I None of the ingredients is listed.
- Seveso category P5c FLAMMABLE LIQUIDS
- Qualifying quantity (tonnes) for the application of lower-tier requirements 5.000 t
- Qualifying quantity (tonnes) for the application of upper-tier requirements 50.000 t
- REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3
- National regulations:
- Other regulations, limitations and prohibitive regulations
The information contained in this safety data sheet does not constitute the user's own assessment of workplace risks, as required by other health and safety legislation.
- 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

— EU —

(Contd. on page 10)

Trade name: **Perfect Line Premium Thinner Toluene free**

(Contd. of page 9)

* **SECTION 16: Other information**

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Relevant phrases**

- H225 Highly flammable liquid and vapour.
- H226 Flammable liquid and vapour.
- H302 Harmful if swallowed.
- H315 Causes skin irritation.
- H318 Causes serious eye damage.
- H319 Causes serious eye irritation.
- H332 Harmful if inhaled.
- H335 May cause respiratory irritation.
- H336 May cause drowsiness or dizziness.

· **Department issuing SDS: Product safety department.**

· **Contact: Ing. R. Derks**

· **Abbreviations and acronyms:**

- RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
- ICAO: International Civil Aviation Organisation
- ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
- IMDG: International Maritime Code for Dangerous Goods
- IATA: International Air Transport Association
- GHS: Globally Harmonised System of Classification and Labelling of Chemicals
- EINECS: European Inventory of Existing Commercial Chemical Substances
- ELINCS: European List of Notified Chemical Substances
- CAS: Chemical Abstracts Service (division of the American Chemical Society)
- VOC: Volatile Organic Compounds (USA, EU)
- DNEL: Derived No-Effect Level (REACH)
- PNEC: Predicted No-Effect Concentration (REACH)
- LC50: Lethal concentration, 50 percent
- LD50: Lethal dose, 50 percent
- PBT: Persistent, Bioaccumulative and Toxic
- vPvB: very Persistent and very Bioaccumulative
- Flam. Liq. 2: Flammable liquids – Category 2
- Flam. Liq. 3: Flammable liquids – Category 3
- Acute Tox. 4: Acute toxicity – Category 4
- Skin Irrit. 2: Skin corrosion/irritation – Category 2
- Eye Dam. 1: Serious eye damage/eye irritation – Category 1
- Eye Irrit. 2: Serious eye damage/eye irritation – Category 2
- STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

· * **Data compared to the previous version altered.**